

Amendments to the Specification

Please replace the paragraph that begins on page 18, line 11, with the following amended paragraph:

With reference now to **Figs. 6A and 6B**, aspects of the operation of the method illustrated in **Fig. 5** are shown. In particular, **Fig. 6A** illustrates a time line showing when the severe shock timer and the mild shock timer of the above-described embodiment are operative. The trace **604** in **Fig. 6B** illustrates the position of the centerline **332** of the write head **304** with respect to the centerline **404** of a target data track **136** in terms of the percent of total track width by which the write head ~~309~~ **304** is off center, and at times corresponding to the events illustrated in the time line of **Fig. 6A**. The example of the operation of an embodiment of the present invention illustrated in **Figs. 6A and 6B** differs from the embodiment illustrated in **Fig. 5** in that a separate off-track timer and severe off-track event or shock timer are used in **Figs. 6A and 6B**.

Please replace the paragraph that begins on page 19, line 18, with the following amended paragraph:

At point **F**, a second off-track event can be seen to occur in **Fig. 6B**. The shock event at time **F** is smaller in magnitude than that at time **B**, and the severe shock timer is not activated. However, the shock at time ~~[[C]]~~ **F** crosses the off-track event threshold **616**, and therefore is severe enough to trigger the off-track timer. This second activation of the off-track timer is illustrated in **Fig. 6A** as arrow **624**. The off-track timer is active from time **F** until time **H**, at which time write operations will again be allowed, provided that the transducer head **124** is otherwise found to be adequately centered in the data

track 136. Note that severe oscillations in the position of the transducer head 126 relative to the centerline 404 of the data track 136 have in the example in Fig. 6B ceased by time H, which time corresponds to the extinction of the off-track timer 624. Also note that the operation of the severe shock timer 612 expires at time G (Fig. 6A), but that write operations will not be allowed until time H. Therefore, it can be appreciated that, at least with regard to one embodiment of the present invention, the operation of the off-track and severe shock timers may overlap. Accordingly, the present invention may protect against track misregistration errors even when off-track events occur in rapid sequence.

Please replace the paragraph that begins on page 26, line 7, with the following amended paragraph:

It will also be appreciated that the average position error 1004 is plotted as distinct segments. This is a direct result of the described method, in which position error samples are taken over each servo sector and a new average calculated for each servo sector. Accordingly, the function used to calculate the average in the described embodiment is not continuous, but is instead piecewise. Although the illustrated embodiment describes calculating the average as each servo sector is passed, this is not necessarily the case. For instance, the average may be computed periodically, such as after every fourth servo sector is traversed. In addition, the average may be determined from a continuously collected position error. Of course, in implementing this embodiment of the present invention, the accumulated error need not be converted to an average ~~value~~ value. For instance, a gross accumulated error may be compared to an

appropriate threshold in determining whether activation of the reduced write fault threshold shock timer is warranted.